

Notice of Allowability

Application No.

10/779,961

Examiner

Daniel I. Walsh

Applicant(s)

LIU ET AL.

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10-4-06 (interview summary).
2. ☒ The allowed claim(s) is/are 1-5, 7-11, 13-60 and 62-78.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>10-4-06</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. Receipt is acknowledged of the Amendment received on 7-10-06.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Bo-In Lin on 10-4-06.

The application has been amended as follows:

Re claim 1: Replace "said optical data track further having a plurality of arc segments formed as cutoff circumferential segments from multiple substantially circular curves wherein said cutoff pieces having a width shorter than diameters of said substantially circular curves" with – said optical data track further having a plurality of arc segments comprising cutoff circumferential segments of multiple substantially circular curves wherein said cutoff piece has a width shorter than diameters of said substantially circular curves, wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral. --

Cancel claim 6

Re claim 8: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral –

Cancel claim 12

Re claim 25: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral –

Re claim 30, line 1: Replace “An optical memory strip” with – A data storage card comprising an optical memory strip --.

Re claim 30, line 3: Replace “at least an optical data track” with – the data storage card comprising at least an optical data track --.

Re claim 30: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Re claims 31-50, 52 line 1: Replace “The OMS” with – the data storage card --.

Re claim 51, line 1: Replace “An optical memory strip” with – a data storage card comprising an optical memory strip --.

Re claim 51, line 3: Replace “at least an optical” with – the data storage card comprising at least an optical –

Re claim 51: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Re claim 53, line 1: Replace “An optical memory strip” with – A data storage card comprising an optical memory strip --.

Re claim 53, line 3: Replace “at least an optical” with – the data storage card comprising at least an optical –

Re claim 51: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Re claim 54, line 2: Replace “useful for implementing as a cutoff piece” with – as a cutoff piece attached to a data storage card –

Re claim 54: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Cancel claim 61

Re claim 73, line 2: “useful for implementing as a cutoff piece” with – as a cutoff piece attached to a data storage card –

Re claim 73: add to the end of the claim -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Re claim 78, line 2: Replace “useful for implementing as a cutoff piece” with – as a cutoff piece attached to a data storage card –

Re claim 78: Replace “said step of forming...constant radius” with -- wherein the multiple substantially circular curves correspond to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral, and wherein the OMS is disposed on the data storage card –

Allowable Subject Matter

3. Claims 1-5, 7-1, 13-60, and 62-78 are allowed.
4. The following is an examiner’s statement of reasons for allowance: the prior art of record fails to teach the data arcs the are from multiple substantially circular curves corresponding to curves of a spiral that has a continuously outwardly varying radius and a non-fixed center as the spiral expands outwards, such that the arc segments correspond to different centers and different radii of the spiral.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see attached PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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D. Walsh

Daniel I Walsh

Examiner

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10-4-06

A handwritten signature in black ink, appearing to read 'D. Walsh', with a stylized flourish at the end.

**DANIEL WALSH
PRIMARY EXAMINER**